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Appln. No. 10/080,070 Amot. Dated May 27, 2004 Reply to Office Action of May 4, 2004

REMARKS

Status of the Claims

Claims 1, 3, 5-8, 12-13 and 15 are pending in the application. Claims 1 and 15 have been amended.

Claims 16-23 are cancelled.

The Office Action

Claim 23 was objected to for failing to further limit the subject matter of a previous claim.

Claims 14, 15, 17, 19, and 21-23 were rejected under 35 U.S.C §103(a) as being unpatentable over Yasuda, et al. (U.S. Patent No. 5,692,586), in view of "Applicant's Admitted Prior Art".

Claims 16 and 18 stand rejected under 35 U.S.C §103(a) as being unpatentable over Yasuda, et al., in view of "Applicant's Admitted Prior Art" and Thomas (U.S. Patent No. 3,003,077).

Claim 20, which was considered to contain allowable subject matter, has been incorporated into claim 15.

Claim 1 has been amended to correct a minor typographical error.

Accordingly, it is submitted that claims 1, 3, 5-8, 12, 13, and 15 are in condition for allowance.

Summary of Interview

Applicants thank the Examiner and his supervisor for the courtesy of a telephone interview, which was conducted on April 20, 2004.

In the interview, the new limitations added to the claims in the amendment filed January 8, 2004, were discussed. The Examiner agreed to consider the new limitations.

The differences between the prior art and the presently claimed structure were discussed. In particular, it was noted that the high loading recited in claim 1 is achieved by a combination of the high TPI on the secondary mandrel and a third mandrel of high diameter. Additionally, the high TPI enables a very high coil density which also allows a high loading. In the Thomas structure, the turns are stacked on top of each other due to the multiple coils wound together in the primary winding. Thus, the actual coil density is not as high. It was noted that in the present case, the winding is chosen to be close to but without appreciable overlapping, i.e. a density approaching 100% (see page 9, para [0030]). This has been found to increase the loading which

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With respect to Yasuda, it was agreed that Yasuda's third mandrel is only 1mm.

CONCLUSION

For the reasons set forth above, it is submitted that claims 1, 3, 5-8, 12, 13, and 15 are in condition for allowance. An early allowance of these claims is earnestly solicited.

Respectfully submitted,

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May 27, 2004

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